

REMARKS/ARGUMENTS

In response to the Office Action dated July 8, 2003, claims 1 and 17 are amended. Claims 1, 4-11, 14, 15 and 17-25 are now active in this application. No new matter has been added.

The indication that claims 11, 14 and 15 are allowable, and that claims 5, 7, 20 and 22 would be allowable if rewritten to overcome the noted indefiniteness and to be in independent form including all the limitations of the base claim and any intervening claims is acknowledged and appreciated.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claims 1, 4-10 and 17-25 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The Examiner contends that in claims 1 and 17, the recitation of a scheduler selectively assigning [memory access] slots to ports is not clear. More specifically, the Examiner contends that it is not clear as to whether the recitation is reciting a scheduler selectively scheduling slots to ports or an assignment means for selecting assigning slots to ports, or how a scheduler selectively assigning slots to ports.

The rejections are respectively traversed.

Case law precedent has established that an analysis under 35 U.S.C. § 112 begins with a determination of whether the claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity. Claim language is viewed not in a vacuum, but

in light of the teachings of the prior art and of the application disclosure as it would be interpreted by one possessing the ordinary level of skill in the art. *In re Johnson*, 558 F.2d 1008, 194 USPQ 187 (CCPA 1977); *In re Moore*, 439 F.2d 1232, 169 USPQ 236 (CCPA 1971).

A decision on whether a claim is invalid under this section of the statute requires a determination of whether those skilled in the art would understand what is claimed when the claim is read in light of the specification, *Seattle Box Co. v Industrial Crating & Packing*, 731 F.2d 381, 385, 221 USPQ 568, 574 (Fed. Cir. 1984).

In determining definiteness, no claim may be read apart from and independent from the disclosure on which it is based. *In re Cohn*, 169 USPQ 95, 98 (CCPA 1971); *In re Kroekel*, 183 USPQ 610, 612 (CCPA 1974):

... claims are not to be considered in a vacuum, "but always in light of the teachings of the prior art and the particular application disclosure as it would be viewed by one possessing the ordinary level of skill in the pertinent art." When considered in light of the prior art and the specification, claims otherwise indefinite may be found reasonably definite.

The Examiner's problem concerning clarity result from the fact that the Examiner is reading the claims in a vacuum and not in light of the specification. Beginning on page 10, under the heading "Programmable Memory Access Slot Assignment", is a description of the scheduler 76 as part of the external memory interface 44 is used for scheduling an issue grants of bandwidths to network switch ports for access to the SSRAM 36. It is further described that assigning portions of the bandwidth refers to memory access slots. The remaining disclosure under this section is a description of the scheduler selectively assigns memory access slots to ports.

In view of such disclosure, the present criticism of the claims is believed to be directed to breadth of scope and not indefiniteness. As such, the rejection improperly attempts to limit the scope of the claims by requiring additional limitations under the guise that such limitations are necessary to make the claims definite.

It is submitted that when the claim language is read in light of the specification, an artisan would readily understand the metes and bounds of the invention. The fact that a claim is broad does not justify a rejection on the ground that the claim is indefinite or incomplete (see § 706.03(d) of the M.P.E.P.). Therefore, it is believed that claims 1 and 17 are definite and it is respectfully urged that the rejection of claims 1, 4-10 and 17-25 under 35 U.S.C. § 112, second paragraph, be withdrawn.

At any rate, claims 1 and 17 are amended to more clearly recite what is intended. Thus, amended claim 1 recites, *inter alia*:

...the external memory interface including a scheduler for selectively assigning memory access slots to ports for access to the external memory, wherein

selectively assigning memory access slots by the scheduler is based on respective programmable information entries, ...

Amended claim 17 recites, *inter alia*:

(2) a scheduler for selectively assigning memory access slots to each of the ports for access to the second memory, the selectively assigning memory access slots to each of the ports being based on a selected one of the plurality of programmable system settings stored in the first memory; ...

REJECTION OF CLAIMS UNDER 35 U.S.C. § 103

Claims 1, 4, 6, 8-10, 17-19, 21 and 23-25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Pei et al. (USPN 6,272,109) in view of Daniel et al. (USPN 5,841,772).

The rejections are respectfully traversed.

As to independent claims 1 and 17, the Examiner contends that Pei et al. discloses nearly all of the subject matter now claimed, except the use of an external controller for storing the programmable information entries into the table as recited in claims 3 and 17. However, Daniel et al. discloses scheduling asynchronous transfer mode (ATM) cell traffic, for transmission over a link in a plurality of cell transmit times. The link supports traffic for a number of virtual path connections, thus each virtual path connection may utilize bandwidth on the link. In each respective cell transmit time, *one virtual path connection is identified as having been assigned the respective cell transmit time as its cell transmit opportunity*. Each virtual path connection supports high priority traffic, such as constant bit rate traffic or variable bit rate traffic, for a plurality of virtual circuit connections. The ATM processing device performing the scheduling determines if there is a high priority service virtual circuit connection, from among those associated with the identified virtual path connection, that is assigned the respective cell transmit time. If the scheduling device identifies such a virtual circuit connection, *then the scheduler provides the opportunity to transmit a cell for that high priority service via the virtual circuit on the link in the respective cell transmit time*. If the high priority service is a CBR service, the virtual circuit connection carries a transmitted cell over the link in the respective cell transmit time. If the service is a variable bit rate service, the scheduler checks whether the circuit is ready to send. If so, the scheduler enables transmission in this cell time.

Thus, Pei et al. discloses scheduling packets (cells) for transmission over a link. However, what is described in Pei et al. is different from what is recited in independent claims 1 and 17. More specifically, claims 1 and 17 are concerned with transferring data packets between a network switch and an external memory, where a scheduler selectively *assigns memory access slots to ports (configured for transferring data packets) for access to the external memory*. External memory 29 of Pei et al. would correspond to the external memory of claims 1 and 17. However, no portion of Pei et al. describes anything about a scheduler selectively assigning memory access slots to ports of the ATM (which are configured for transferring data packets) for access to the external memory 29.

Consequently, even if it were presumed that Daniel et al. discloses use of an external controller for storing programming information entries into a table memory, which Applicants do not admit, the inventions recited in claims 1 and 17 do not result even if such teaching of Daniel et al. were used to modify the arrangement of Pei et al.

As to Daniel et al., while the reference discloses a scheduler, the Examiner cannot disregard the description in the reference of both the Scheduler Unit 46, beginning at column 21, line 30, and the description of the Cell Buffer Memory 68 beginning at column 28, line 13. With respect to the Cell Buffer Memory 68 in particular, the interface 180 for the CBM 68 (FIG. 13) would appear to correspond to the claimed external memory interface. There is nothing in this description that describes that programmable information entries, used by the scheduler for selectively assigning (to ports of the ATM) memory access slots of/to the external memory, are stored in an assignment table memory (of the interface) by an external controller. Clearly, the

Examiner's reference to the object at column 6, lines 55-61 is not carried forth to this specific description of the interface 180 for the CBM 68.

Consequently, there is nothing in Daniel et al. also, which discloses or suggests that programmable information entries, used by the scheduler for selectively assigning memory access slots (to ports of the ATM) of/to the external memory, are stored in an assignment table memory (of the interface) by an external controller.

In view of the above, independent dependent claims 1 and 17, as amended, are patentable over Pei et al. and Daniel et al., considered alone or in combination, as are claims 4, 6, 8-10 depending from claim 1, and 18, 19, 21 and 23-25, depending from independent claim 17.

CONCLUSION

Accordingly, it is urged that the application, as now amended, is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.

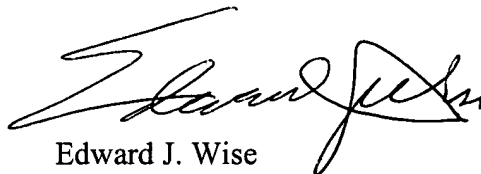
Accordingly, it is urged that the application, as now amended, overcomes the rejection of record and is in condition for allowance. Entry of the amendment and favorable reconsideration of this application, as amended, are respectfully requested. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY

A handwritten signature in black ink, appearing to read "Edward J. Wise", written over a horizontal line.

Edward J. Wise
Registration No. 34,523

600 13th Street, NW
Washington, DC 20005-3096
(202) 756-8000 EJW/
DATE: September 25, 2003
Facsimile: (202) 756-8087